DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

AS1EU Revision 4 Global Skyship Skyship 600

August 7, 1997

TYPE CERTIFICATE DATA SHEET NO. AS1EU

This data sheet, which is a part of Type Certificate AS1EU, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

TYPE CERTIFICATE HOLDER: Global Skyship Industries, Inc.

1001 Armstrong Boulevard Kissimmee, FL 34741

I. Model Skyship 600 (Normal Category), approved May 9, 1989

Engine. Two (2) Porsche 930/67/AI/3. (Reduction Ratio 37:19)

<u>Fuel</u> 100/100LL grade aviation gasoline.

Engine Limits. For take-off (5 min) at 5200 rpm (255 hp)

For continuous operation, 4600 rpm: (230 hp)

Maximum manifold pressure is 45.5 in Mercury (Hg) (absolute)

Propeller and Two (2) Hoffmann HO-V 155 A-R/137

<u>Propeller Limits</u> Number of blades = 5

Propeller diameter = 1372mm (54 in) Pitch settings at propeller tips:

> Forward Cruise (FC) = $28^{\circ} \pm 1^{\circ}$ Forward Max Power (FMP) = $25.5^{\circ} \pm 1^{\circ}$ Forward Fine (FF) = $5^{\circ} \pm 1^{\circ}$

Reverse (R) = $19.5^{\circ} \pm 1^{\circ}$

Airspeed Limits (IAS). Vmo (Maximum Operating) 50 knots

Vra (Rough Air) 45 knots Vmc (Minimum Control) 10 knots

C.G. Range. Reference Airship Flight Manual

Page 2-7 Fig. 2.2 for variation due to Helium fill

<u>Datum</u> Forward face of the engine room bulkhead, 27 meters aft of the

nose cone F.P.

Page No.	1	2	3
Rev. No.	4	4	4

AS1EU 2

<u>Leveling Means</u> Inclinometer located on the lefthand side of the speaker box.

Weights. Maximum weight 7100 kg

Maximum Car Weight 4984 Kg

<u>Lifting Gas.</u> Helium is the only approved lifting gas

Envelope and Ballonets. Envelope Gross Volume 6666 Cubic Meters

MaximumEnvelope Pressure 2.8 inches W.G.

Minimum Envelope Pressure (in Hangar) 0.8 inches W.G.

Maximum Ballonet Differential Pressure 0.9 inches W.G. Ballonet Volume 27% of envelope gross Volume

Minimum Crew. Two (2); Pilot and Co-Pilot

Maximum Number of Seats. Eleven (11), including two (2) crew seats

DATA PERTINENT TO ALL MODELS

Ser. Nos. Eligible. 1215-01 thru 1215-09 and 600-10 and subsequent

Note: Serial numbers 1215-01 through 1215-09 were manufactured in the United Kingdom (UK) under UK CAA manufacturing approval authority. Serial numbers 600-10 and subsequent will be manufactured in the US under FAA manufacturing approval authority.

<u>Import Requirements.</u> (Requirements applicable to serial numbers 1215-01 through 1215-09 only):

The United Kingdom Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft, serial numbers 1215-01 through 1215-09, for which application for certification is made.

To be considered eligible for operation in the United States, aircraft serial numbers 1215-01 through 1215-09 manufactured under this type certificate must be accompanied by a certificate of airworthiness for export or certifying statement endorsed by the exporting foreign civil airworthiness authority which states (in the English Language): This aircraft conforms to its U.S. type design (type certificate number AS1EU) and is in a condition for safe operation.

The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 and exported by the country of manufacture is FAR Sections 21.183(c) or 21.185(c).

The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 exported from countries other than the country of manufacture (e.g., third party country) is FAR Sections 21.183(d) or 21.183(b).

3 AS1EU

Certification Basis.

For all serial numbers:

FAR 21.17(b) effective February 1, 1965, including Amendments 21-1 through 21-60. Compliance with FAR 21.17(b) has been shown using the provisions of Advisory Circular 21.17-1, Section 5, paragraph a. The airworthiness requirements met under this provision are FAA Document FAA P-8110-2, Airship Design Criteria, dated November 2, 1987.

For serial numbers 1215-01 through 1215-09:

FAR 21.29 in addition to the certification basis noted above. See Note 4.

Application for Type Certificate dated 16 January 1986.

Equipment.

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, CAA and FAA-Approved Flight Manual DR/AI/110, as appropriately amended in relation to the actual modification standard of the airplane, is required.

Production Basis.

None. Prior to original certification of each aircraft, serial numbers 600-10 and subsequent, an FAA representative must perform a detailed inspection for workmanship, materials, and conformity with the approved technical data, and a check of the flight characteristics.

Maintenance & Inspection

Service bulletins, structural repair manuals, vendor manuals, aircraft flight manuals, and overhaul and maintenance manuals dated prior to February 2, 1994, which contain a statement that the document is CAA approved, are accepted by the FAA and are considered FAA approved. Any revision to maintenance, inspection and repair manuals dated February 2, 1994, or later, must be approved by the FAA.

NOTES.

NOTE 1.

An approved seat belt must be provided for each seat.

NOTE 2. Not approved for flight in Instrument Meteorological Conditions (IMC) unless compliance is shown with the requirements of Airship Design Criteria FAA P-8110-2, paragraph 6.7.

NOTE 3.

Airworthiness Limitations

Chapter 5, of the Skyship 600 Maintenance Manual, dated March 15, 1986, specifies mandatory replacement times, structural inspection intervals and related structural procedures, and operation checks. These airworthiness limitations may not be changed without FAA approval.

NOTE 4.

This type cerificate was originally issued to Airship Industries, UK, on May 9, 1989, under the provisions of FAR 21.29. It was transferred to Slingsby Aviation Ltd, in the UK, on September 24, 1990, and to Westinghouse Airships, Inc., in the US, on February 2, 1994.